

Listing of Claims:

Claims 1-13 (canceled).

Claim 14 (original): In an asymmetric communication system for effecting communications between a server and a plurality of remote processor devices over a high-speed downstream channel and a lower speed upstream channel interposed between said server and said remote processor devices, the improvement comprising:

an independently operating downstream controller for transferring information to said remote processor devices,

an independently operating upstream controller for receiving information from said remote processor devices, and

a configuration manager utilizing each of said upstream and downstream controllers to assign and, by obtaining feedback from said remote processor devices, to confirm assignment of an IP address to a remote processor device based on a detected identification of said remote processor device when connected to and operating on said network.

Claim 15 (original): The asymmetric network as recited in claim 14 wherein said configuration manager further includes routines for constructing upstream power levels at which said remote processor device is to transmit, and said remote processor device transmits the response packet containing information confirming assignment of its transmit power level.

Claim 16 (original): The asymmetric network as recited in claim 15 wherein said configuration manager and said remote processor device iteratively issues instructions to set the power level, to transmit at said set power level and to continue to reset said power level until the desired power level is reached as detected at said upstream controller.

Claim 17 (previously presented): The two-way asymmetric network as recited in claim 14 wherein said configuration manager further includes routines for adjusting

frequency assignments to be utilized by said remote processor devices to transmit upstream to said upstream controller.

Claim 18 (original): The two-way asymmetric network as recited in claim 14 wherein said upstream controller includes digital signal processors for analyzing and registering in a memory the quality of upstream transmissions by said remote processor devices.

Claim 19 (original): The two-way asymmetric network as recited in claim 18 wherein assignment of upstream channels to send remote processor devices is made in accordance with information analyzed by said digital signal processors.

Claim 20 (previously presented): The two-way asymmetric network as recited in claim 18 wherein said downstream controller utilizes quadrature amplitude modulation techniques for transmitting digital data signals downstream to said remote processor devices.

Claim 21 (original): The two-way asymmetric network as recited in claim 20 wherein said remote processor devices utilizes VSB modulation techniques for encoding information signals transmitted upstream to said upstream controller.

Claim 22 (previously presented): The two-way asymmetric network as recited in claim 14 wherein said remote processor device includes a processor for receiving network operating software automatically downloaded from said configuration manager.

Claim 23 (previously presented): The two-way asymmetric network as recited in claim 14 wherein said configuration manager issues control packets that assign one of shared channel use and dedicated channel use for two-way communication with the remote processor device.

Claim 24 (original): The asymmetric network as recited in claim 14 wherein said configuration manager issues the control packet containing information that assigns the

class of service level for a remote processor device connected to said network.

Claim 25 (original): In a wireless communication system for effecting asymmetric communications between a server and a plurality of remote processor devices over a high-speed RF broadcast channel and a lower speed upstream channel interposed between said server and said remote processor devices, the improvement comprising:

an independently operating downstream controller for broadcasting information to said remote processor devices,

an independently operating upstream controller for receiving information from said remote processor devices, and

a configuration manager in communication with each of said upstream and downstream controllers and being operative to assign and, by obtaining feedback from said remote processor devices, to confirm assignment of an IP address to a remote processor device based on a detected identification of said remote processor device when connected to and operating on said network.

Claim 26 (original): The wireless network as recited in claim 25 wherein said RF broadcast channel is carried in at least one of: a CATV broadcast network; a direct broadcast satellite network; and a cellular network.

Claim 27 (original): The wireless network as recited in claim 25 further including a configuration manager that includes routines for instructing upstream power levels at which said remote processor device is to transmit, and said remote devices transmit the response packet containing information confirming assignment of its transmit power level.

Claim 28 (original): The wireless network as recited in claim 25 further including a configuration manager that transmits control packets to said remote devices to effect configuration thereof according to configuration parameters, and said remote devices transmit the response packet containing information confirming operation of said remote device in accordance with said configuration parameters.

Claim 29 (original): The wireless network as recited in claim 28 wherein said configuration parameters include at least one of: upstream channel assignment; address assignment; transmission credit value; and bandwidth allocation.

Claims 30-104 (canceled).

Claim 105 (previously presented): In an asymmetric communication system for effecting communications between a server and a plurality of remote processor devices over a high-speed downstream channel and a lower speed upstream channel interposed between said server and said remote processor devices, a method for configuring the remote processor devices comprising:

- assigning an IP address to a remote processor device over the downstream channel based on detected identification of said remote processor device; and
- obtaining feedback from the remote processor device over the upstream channel to confirm assignment of the IP address.

Claim 106 (previously presented): A method according to claim 105, further comprising:

- assigning, over the downstream channel, an upstream power level at which the remote processor device is to transmit; and
- obtaining feedback from the remote processor device over an upstream channel to confirm assignment of the upstream power level.

Claim 107 (previously presented): A method according to claim 106, wherein assigning the upstream power level comprises:

- iteratively issuing instructions to the remote processor device to adjust its upstream power level until a desired power level is reached.

Claim 108 (previously presented): A method according to claim 105, further comprising:

adjusting frequency assignments to be utilized by the remote processor devices to transmit upstream.

Claim 109 (previously presented): A method according to claim 105, further comprising:

analyzing and registering in a memory the quality of upstream transmissions by the remote processor devices.

Claim 110 (previously presented): A method according to claim 109, further comprising:

assigning upstream channels for the remote processor devices based on the analysis of the quality of upstream transmissions.

Claim 111 (previously presented): A method according to claim 105, further comprising:

utilizing quadrature amplitude modulation techniques for transmitting digital data signals downstream to the remote processor devices.

Claim 112 (previously presented): A method according to claim 111, further comprising:

utilizing VSB modulation techniques for encoding information signals transmitted upstream by the remote processor devices.

Claim 113 (previously presented): A method according to claim 105, further comprising:

downloading network operating software to the remote processor devices over the downstream channel.

Claim 114 (previously presented): A method according to claim 105, further comprising:

assigning a class of service level for a remote processor device over the downstream channel.

Claim 115 (previously presented): A method according to claim 105, wherein the downstream channel is carried in at least one of: a CATV broadcast network; a direct broadcast satellite network; and a cellular network.

Claim 116 (previously presented): A method according to claim 105, wherein the downstream channel and the upstream channel are wireless.

Claim 117 (previously presented): A method according to claim 105, further comprising:

configuring at least one of an upstream channel assignment, an address assignment, a transmission credit value, and a bandwidth allocation for the remote processor devices over the downstream channel.